TRUSCON
HY-RIB
METAL LATH

TRUSCON
HOME BUILDING PRODUCTS

STEEL CASEMENT WINDOWS

STEEL BASEMENT WINDOWS

STEEL LINTELS

1-A METAL LATH

EXPANDED CORNER BEAD

3/8″ HY-RIB
AND DIAMOND LATH

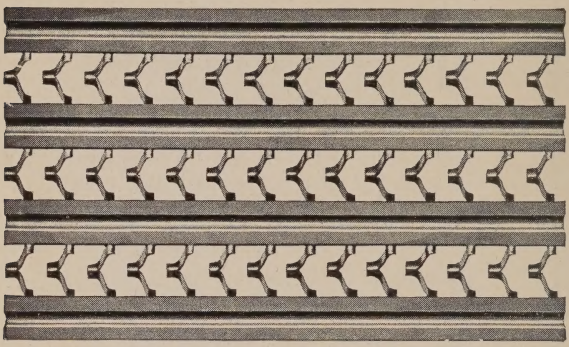
GARAGE DOORS
AND FRAMES

Manufactured by
TRUSCON STEEL COMPANY
Youngstown, Ohio

FORM 525-25M-10-24-TSC.

BUILDERS are fast appreciating the many advantages of fire-resistive construction; the contractor appreciates the advantages of a metal lath which enables him to do superior work, and the architect appreciates the advantages of a construction that will perpetuate what he has so carefully designed, maintaining and permanizing its beauty.

Truscon Hy-Rib and Metal Lath satisfies these requirements in an economical way. Its use in thousands of structures in the United States and abroad is a testimonial to its worth and to the high estimation in which it is held by prominent architects and contractors, whose buildings are thus assured the permanence necessary to maintain their attractive appearance.



Truscon 1-A Lath

TRUSCON 1-A Lath is extremely popular for one-side plastering. Sharply defined ribs, running full length of the sheet and spaced 9/16" apart, provide an exceptionally rigid surface for plastering; two keys and four rudder-like projections provide a tenacious mechanical "key" for the plaster that is practically automatic with slight pressure. Its rigidity permits wide support, spacing and when combined with the "key" permits of rapid covering by workmen. Many plasterers refer to plastering on 1-A Lath as "rubbing on the mud" and say that they save as much as 20 per cent in labor and plastic material over ordinary types of metal lath.

Truscon 1-A Lath can be used efficiently with either ½" or ¾" grounds and plastered with either the dry process or wet process method the same as wood lath.

Properties of 1-A Lath

Type	Weight Per Sq. Yd.	Maximum Stud Spacing	Maximum Joist Spacing
1-A Lath	3.2 lbs.	24"	24"

Can be furnished in open hearth or copper bearing steel—all painted.

Shipping Data

Lgth. Sheet	Width Sheet	Sq. Yd. Per Sheet	Sheets Per Bundle	Sq. Yds. Per Bundle	Weight Per Bundle
96"	18"	1-1/3	15	20	64 lbs.

1-A Lath with 1-2″ Grounds

FOR homes, Truscon 1-A Lath, when used in connection with our recommended method of construction, will be found as economical as wood lath, plaster boards or other types of incombustible plaster bases.

This construction merely requires that the grounds be ½″, or if ¾″ or ⅞″ grounds are necessary, that the lath be furred out ⅜″ from the face of studs by means of wood furring strips (ordinary wood lath). This permits the same thickness of plaster over the face of the metal lath as is standard over wood lath. Then, too, there is the additional advantage of permanently beautiful walls at no expense for repairs and redecoration.

Specification for Truscon 1-A Home Lath

PROVIDE Truscon 1-A Lath, weighing 3.2 pounds per square yard, painted, as the Metal Lath base for all interior plastering.

Supports shall in no instance exceed 24″ centers.

Ground-strips ½″ thick should be attached in accordance with standard practice. If ¾″ grounds are used, attach ⅜″ wood furring strips (wood lath) to all studs. Wood furring strips shall be continuous from floor to ceiling and attached with 6-d nails every 12″ throughout their length.

Metal Lath shall be first applied to the ceilings with ribs against the supports and the sheet carried down six inches onto the walls. Lath on walls shall be started one stud away from corner, be bent into the angle and carried onto the abutting wall, so as to avoid a joint at juncture of walls. Sheets shall be staggered so as to eliminate a continuous line of laps.

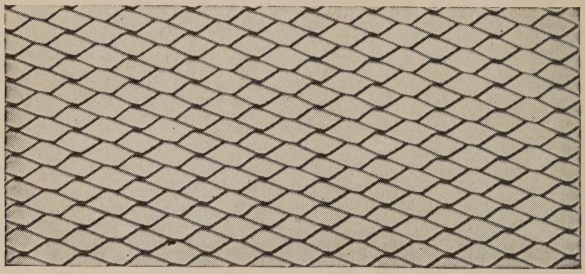
Lath shall be placed so that lower sheet laps over the upper (not vice versa). It shall be securely attached to supports by means of 6-d nails or 14-gauge wire staples, with a nail or staple, where sides of sheets lap at supports. On walls clinch of nails shall be upward, not downward.

Lath shall be lapped at sides by nesting outside ribs, and at ends 1″.

NOTE

Any hard wall plaster gives satisfactory results on Truscon 1-A Lath. Make the consistency a little dryer than ordinarily used on wood lath.

Due to the extreme rigidity and perfect key of Truscon 1-A Lath, it is not necessary for the initial coat of plaster to set before application of the brown coat.



Truscon Diamond Lath

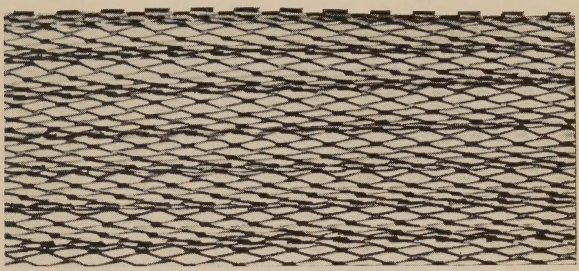
TRUSCON Diamond Laths are the most practical types of Diamond Lath on the market. Sheets are trimmed exactly 8′ 1″ in length, with edges absolutely straight, thereby saving in laps. The diamonds are small size, preventing workmen from wasting materials due to excessive pressure forcing plaster through on back side.

Truscon Diamond Laths are extremely rigid and the maximum size sheet permits low cost of erection. Easily cut, bent or formed in any shape to meet building requirements. Particularly recommended for fire-stops, cornices, false beam and column work, as well as solid partitions.

Shipping Data

Weight Yard	Length Sheet	Width Sheet	Sq. Yds. Sheet	Sheets Bundle	Sq. Yds. Bundle	Weight Bundle
2.2	96″	27″	2	10	20	44 lbs.
2.5	96″	27″	2	10	20	50 lbs.
3.0	96″	27″	2	10	20	60 lbs.
3.4	96″	27″	2	10	20	68 lbs.
		GALVANIZED				
2.5	96″	27″	2	10	20	50 lbs.
3.4	96″	27″	2	10	20	68 lbs.

Can be furnished in either open hearth or copper-bearing steel. All material excepting galvanized is painted.



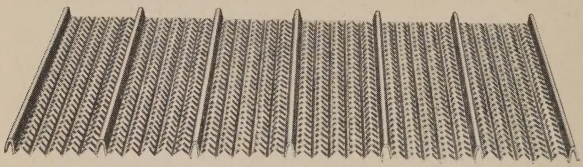
Self Furring Diamond Lath

TRUSCON Self-Furring Diamond Lath has ½" deep corrugations running full length of the sheet and spaced 1½" apart. These corrugations provide exceptional rigidity and permit of wide support spacing. This type of lath is particularly advantageous for exterior stucco when the lath is attached over sheathing, because it eliminates the necessity of separate furring strips. Truscon Self-Furring Diamond Lath has small size mesh, giving the same economy of plaster as the flat Diamond Laths, with the added advantage of greater rigidity, which means less labor cost and rapid progress of the job.

Shipping Data

Weight Yard	Length Sheet	Width Sheet	Sq. Yds. Sheet	Sheets Bundle	Sq. Yds. Bundle	Weight Bundle
2.2	96"	27"	2	10	20	44 lbs.
2.5	96"	27"	2	10	20	50 lbs.
3.0	96"	27"	2	10	20	60 lbs.
3.4	96"	27"	2	10	20	68 lbs.
			GALVANIZED			
2.5	96"	27"	2	10	20	50 lbs.
3.4	96"	27"	2	10	20	68 lbs.

Can be furnished in either open hearth or copper-bearing steel. All material excepting galvanized is painted.



Truscon 3/8″ Hy-Rib

TRUSCON 3/8″ Hy-Rib Lath is a self-furring lath. It is generally preferred because it permits wide spacing of studs, and saves channels and wiring. Used for stucco and plaster work on ceilings, straight-away partition work with channels, in sidings, as furring, etc., there is absolutely no waste in side laps.

3/8″ Hy-Rib Lath is manufactured from a single plate of steel. Deep stiffening ribs run full length of the sheet, with distance between ribs spanned by rows of ingenious "keys". In erecting, ribs should be against the supports so as to fur out the face of the lath and permit plaster to penetrate through mesh.

Contractors will find it exceptionally economical to work on 3/8″ Hy-Rib because its rigidity and "key" permits of rapid covering with minimum effort, and for long span work it is unequalled. For exterior stucco it provides a rigid base that can be used over sheathing or for back plastered construction. 3/8″ Hy-Rib is also popular for use as a reinforcing for concrete slabs over steel joists. The Hy-Rib is laid over joists with ribs up and concrete is applied. Where wood floors are to be laid over concrete, flooring is attached to wood screeds placed over lath before concrete is applied.

Properties of 3/8″ Hy-Rib

Weight Sq. Yd.	Height Ribs	Spacing Ribs	Stud. Spac. for walls and part.	Spac. Supports for Ceilings
3.0 lbs.	3/8″	4″	19″ to 24″	16″ to 20″
3.5 lbs.	3/8″	4″	24″ to 30″	16″ to 24″
4.0 lbs.	3/8″	4″	32″ to 36″	24″ to 32″

Can be furnished in copper bearing or open hearth steel—all painted.

3/8″ Hy-Rib for Reinforcing

As a reinforcement for concrete slabs, 3/8″ Hy-Rib will be found highly satisfactory. The following tables are computed for floor slabs in which 3/8″ Hy-Ribs is not plastered on the under side. 4 lb. Hy-Rib is usually used, although for short spans up to 16″ the 3 lb. Hy-Rib will be found sufficient. Be sure to refer to these tables before ordering material.

Total Safe Loads

W—Live Load per Square Foot, Uniformly Distributed.
P—Concentrated Load per Foot of Width.

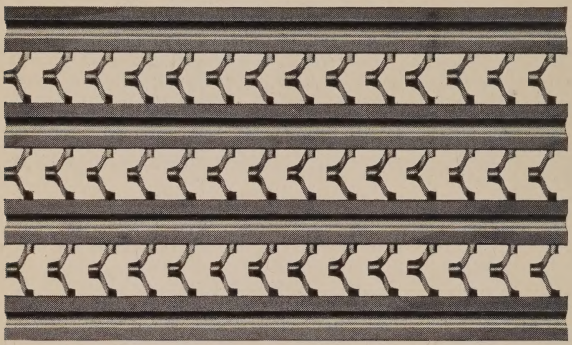
Slab Thickness	4.0 lb., 3/8″ Hy-Rib. Area of Steel per foot of width (Sq. Ins.)	SPAN OF SLAB (Center to Center)							
		12″		16″		19″		24″	
		W	P	W	P	W	P	W	P
2″	.0712	1233	617	688	458	479	379	291	291
2½″	.0712	1560	780	870	580	607	480	370	370
3″	.0712	1890	945	1055	703	735	582	447	447

Concrete in compression not over 550 lbs. per square inch.
Steel in tension, 16,000 lbs. per square inch.
Unit Shear not over 50 lbs. per square inch.

Wt. Per Sq. Yd. of 3/8″ Hy-Rib Lath	Area of Steel Per Ft. of Width	For carrying capacity multiply above loads by	Strength as Centering Joist Spacing
3.0 lbs.	.0522 sq. in.	.73	12″ to 16″
3.5 lbs.	.0610 sq. in.	.85	12″ to 19″
4.0 lbs.	.0712 sq. in.	1.00	12″ to 24″

Shipping Data

Length Sheet	Width Sheet	Sq. Yds. Sheet	Sheets Bundle	Sq. Yds. Bundle	Wt. Per Bundle		
					3.0 lb.	3.5 lb.	4.0 lb.
					lbs.	lbs.	lbs.
6′	24″	1-1/3	18	24	72	84	96
8′	24″	1-7/9	18	32	96	112	128
10′	24″	2-2/9	18	40	120	140	160
12′	24″	2-2/3	18	48	144	168	192



Truscon 2-A Lath

TRUSCON 2-A Lath is of the same mechanical design as 1-A Lath, but is manufactured from a heavy gauge sheet. It has the same depth of rib running full length of the sheet, and spaced 9/16″ apart. Due to its additional rigidity it permits of a wider support spacing than 1-A Lath, and is recommended for one side plastering where supports are spaced up to 28″.

Truscon 2-A Lath is particularly advantageous on long span one side plaster work and as a backing for tile. It is extensively used for this latter purpose throughout the country, and contractors enthusiastically indorse it. Any inexperienced plasterer should be able to cover at least 15 per cent more area on Truscon 2-A Lath than on any ordinary type of Metal Lath.

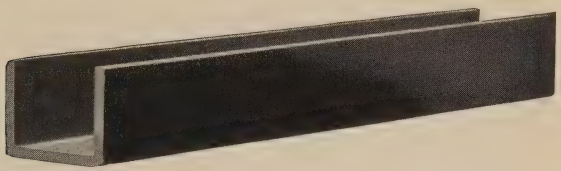
Properties of 2-A Lath

Type	Weight Per Sq. Yd.	Maximum Stud Spacing	Maximum Joist Spacing
2-A Lath	4.0 lbs.	28	28

Can be furnished in open hearth or copper bearing steel—all painted.

Shipping Data

Lgth. Sheet	Width Sheet	Sq. Yd. Per Sheet	Sheets Per Bundle	Sq. Yts. Per Bundle	Weight Per Bundle
96″	18″	1-1/3	15	20	80 lbs.

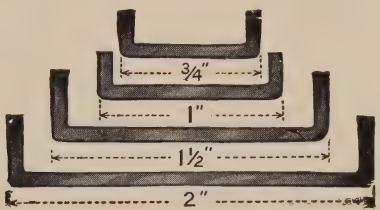


Truscon Square Channels

TRUSCON Square Channel is a Cold Rolled Channel. The back of the Channel is 11/16″ wide, and the flanges 9/16″ high. The flanges are turned from the back with a true, square corner, making the side of one flange, the back or the face (edge of two flanges) equally efficient as a bearing surface. This type of Channel reduces the cost of erection and eliminates faulty construction, due to channel turning on back after it is in place.

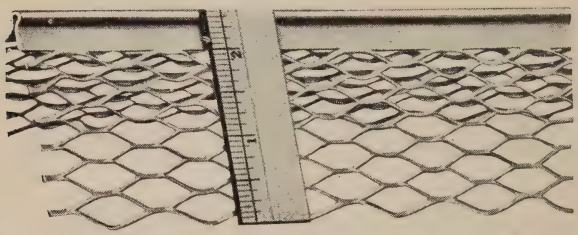
Truscon Square Channel is manufactured from 18 gauge strip steel and weighs 271 lbs. per thousand linear feet. It is furnished in stock lengths of 16 feet and 20 feet, 25 pieces per bundle.

Cold Rolled Channel

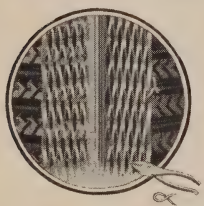


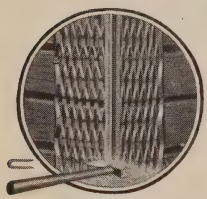
SIZE	¾″	1″	1-½″	2″
Weight in lbs. per lineal foot	.276	.332	.442	.553

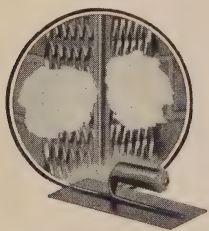
No. 16 gauge (thickness, .065″.)
Stock lengths—12, 14, 16, 18 and 20 feet.
Shipped in bundles of 25 channels.



Truscon Expanded Corner Bead







TRUSCON Expanded Corner Bead is manufactured from galvanized Copper Bearing Steel, with a heavy shoulder to assure straighness and rigidity. The round nose is strongly reinforced underneath by a deep groove which holds the plaster flush for a perfect bond at the bead.

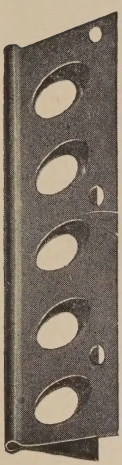
The 2½″ wide expanded apron is made integral with the bead, eliminating the costly necessity of attaching separate clips, and giving from 2″ to 2¼″ projection on the plaster base. This apron prevents cracks by distributing strains over a greater area, provides additional rigidity when erected, and is double assurance against loosening.

Truscon Expanded Corner Bead can be used with equal facility on wood lath, metal lath or masonry. It is not necessary to limit attachments to certain positions, as the apron will take wire or nails at any point along its length.

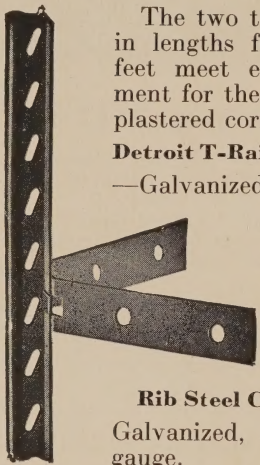
Shipping Data

Truscon Expanded Corner Bead weighs 0.2 lbs. per linear foot, and is furnished in 6′, 7′, 8′, 9′, 10′, and 12′ lengths, bundled 10 pieces to the bundle.

Truscon Corner Bead



Rib Steel Corner Bead



Detroit T-Rail Corner Bead

The two types of beads in lengths from 6 to 10 feet meet every requirement for the protection of plastered corners.

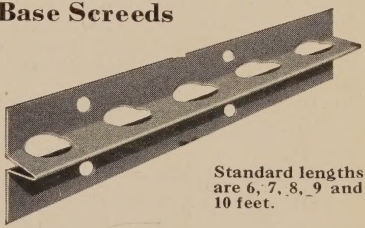
Detroit T-Rail Corner Bead—Galvanized, in 26-gauge.

Rib Steel Corner Bead

Galvanized, in 24 or 26 gauge.

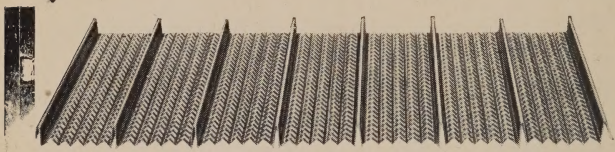
Other types of corner beads and base screed can be furnished if required.

Truscon Metal Base Screeds



Standard lengths are 6, 7, 8, 9 and 10 feet.

Used in place of wood screeds between cement bases and plastered walls. They provide an excellent ground for the paster and cement work. Truscon metal screeds are furnished in 24-gauge metal, galvanized, before or after forming. The screeds weigh .175 pounds per lineal foot and are shipped 12 pieces per bundle.



Truscon 3/4″ Hy-Rib

TRUSCON 3/4″ Hy-Rib is more than a Metal Lath—it is a concrete reinforcement for floors, roofs, tanks and arches that saves forming.

For arched floors, balconies and other construction, where elaborate and expensive wood forming is usually required, 3/4″ Hy-Rib can be substituted with a big saving in material and labor.

The heavy reinforcing ribs spaced 4″ apart make it possible to have supports as much as 11 feet apart. Hy-Rib sheets can be furnished curved to practically any radius, or they may be bent in the field with a hand bending machine. On large jobs, contractors will find it more economical to use this machine and have the Hy-Rib shipped in flat sheets.

Properties of 3/4″ Hy-Rib

Wght. Per Sq. Foot	Height of Ribs	Spacing of Ribs	No. Ribs Per Sheet	Width of Sheet	Cross Sectional Area per foot Width
.58	3/4″	4″ C to C	8	28″	.1172 sq. in.
.68	3/4″	4″ C to C	8	28″	.1407 sq. in.
.78	3/4″	4″ C to C	8	28″	.1642 sq. in.

Can be furnished in either Copper Bearing or Open Hearth Steel—all painted.

Shipping Data

Length Sheet	Width Sheet	Sq. Ft. Sheet	Sheets Bundle	Sq. Ft. Bundle	Wt. Per Bundle		
					.58 lb.	.68 lb.	.78 lb.
					lbs.	lbs.	lbs.
6′	28″	14	8	112	65.0	76.1	87.4
8′	28″	18-2/3	8	149-1/3	86.6	101.6	116.5
10′	28″	23-1/3	8	186-2/3	108.3	126.9	145.6
12′	28″	28	8	224	129.9	152.3	174.7

3/4″ Hy-Rib Slab Table

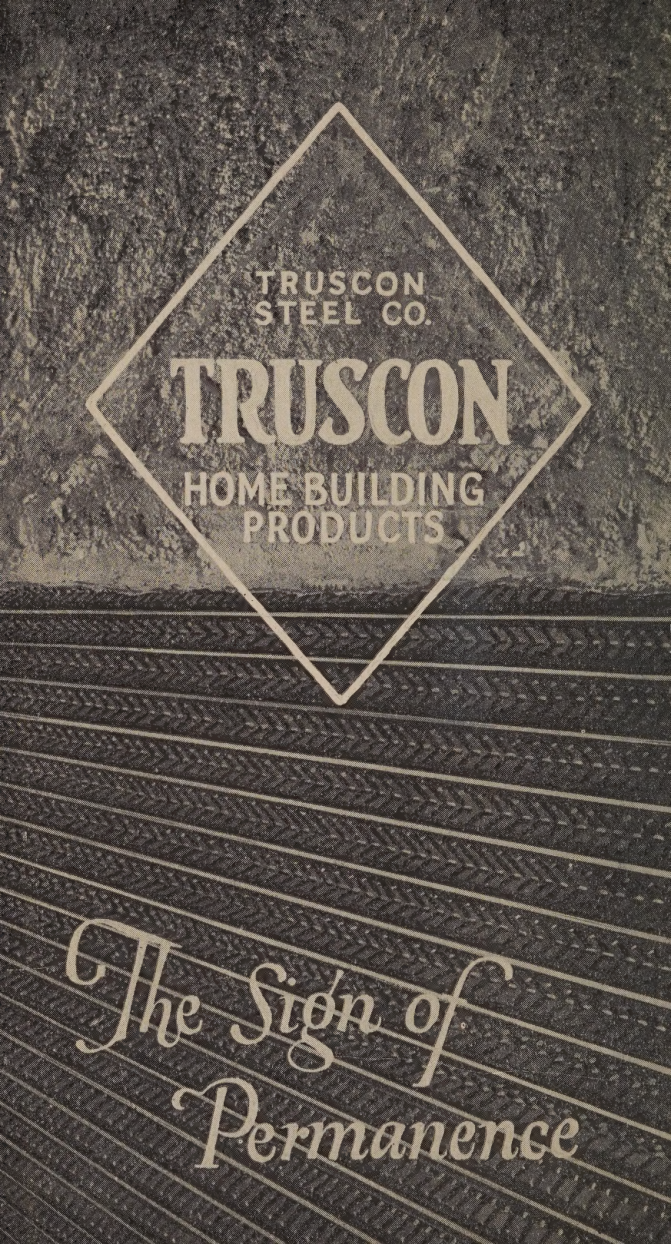
(Safe Loads include Weight of Slab. For Safe Live Load Deduct Weight of Slab).

Thickness of Slabs above Base of Hy-Rib	Weight Per Square Foot 3/4″ Hy-Rib	* "A"	Moment of Resistance Per Foot of Width	Safe Loads in Pounds, per Sq. Ft. for Various Spans (in feet).								
				3′	4′	5′	6′	7′	8′	9′	10′	11′
2″ thick slab	.58	3–4	3440	318	179	115	80	.....	.....	.....	.....	.....
Weight= 24 lbs.	.68	3–8	3940	365	205	131	91	.....	.....	.....	.....	.....
per sq. ft.	.78	3–11	4160	385	216	138	96	.....	.....	.....	.....	.....
2½″ thick slab	.58	3–0	4530	420	236	151	105	77	59	.....	.....	.....
Weight= 30 lbs.	.68	3–3	5380	498	280	179	125	91	70	.....	.....	.....
per sq. ft.	.78	3–6	6230	577	325	208	144	106	81	.....	.....	.....
3″ thick slab	.58	2–9	5630	522	293	188	131	96	73	.....	.....	.....
Weight= 36 lbs.	.68	3–0	6710	622	349	224	155	114	87	69	.....	.....
per sq. ft.	.78	3–3	7780	720	405	259	180	132	101	80	.....	.....
3½″ thick slab	.58	2–6	6750	625	352	225	156	115	88	.....	.....	.....
Weight= 42 lbs.	.68	2–9	8020	743	418	268	186	136	104	83	.....	.....
per sq. ft.	.78	3–0	9300	862	484	310	215	158	121	96	78	.....
4″ thick slab	.58	2–4	7850	727	409	262	182	134	102	81	.....	.....
Weight= 48 lbs.	.68	2–7	9350	866	487	312	216	159	122	96	78	.....
per sq. ft.	.78	2–9	10870	1060	566	362	252	185	142	112	91	75

B. M.= 1/10 WL2 For B. M.= 1/12 WL2, add 20 per cent to above loads.
For B. M.= 1/8 WL2, deduct 20 per cent from above loads

* "A"= Maximum Spans for 3/4″ Hy-Rib as centering to support wet concrete.
For greater spans use temporary supports.

TRUSCON STEEL CO. YOUNGSTOWN, OHIO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The Sign of
Permanence